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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,450	11/12/2003	Scott William Rosencrance	09328.105084 US	7997

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,450

Applicant(s)

ROSENCRANCE ET AL.

Examiner

Carlos Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 22, 25-50, 53 and 56-80 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19, 22, 25-50, 53 and 56-80 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 IDS'S.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

The amendment filed on 6/20/05 has been entered.

Information Disclosure Statement

The information disclosure statement filed on 6/14/04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; specifically WO 97/32076.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10,15-19,22, 25-27, 29-30, 60-64, 70-80 are rejected under 35 U.S.C. 103(a) as obvious over Miyauchi et al (US 5,801,135) in view of Cook et al (WO 93/22491). Miyauchi et al discloses a deinking composition comprising fatty acid (a) and a nonionic surfactant (b), see abstract. The composition of (a) and (b) ranging from 5/95 to 40/60 weight ratio which is converted to a 5 to 40% by weight of a fatty acid (a). Miyauchi et al is silent disclosing the claimed step (a) of converting the waste paper to a non-alkaline or low alkaline pulp slurry, the claimed step (b) of contacting the slurry with the deinking composition and claimed step (c) of separating the ink from the pulp slurry by washing and/or flotation.

However, the claimed steps a-c as noted by Cook et al, are steps done by the prior art to deink waste paper. Note pages 1-2 explicitly showing converting the waste

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paper to a slurry, contacting the slurry with "chemicals for detachment of the printing ink", the claimed deinking blend, and removal of the ink by washing or flotation.

Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have used Miyauchi et al discloses a deinking composition as used in the prior art, as noted by Cook et al, in order to de-ink waste paper.

As for claim 2, as shown in the examples the first fatty acid is non-alkoxylated.

As for claims 3-4 and 71-72, the first fatty acid comprises 40 to 90%wt of fatty acids having 12 to 14 carbon atoms and less than 60% wt fatty acids having 16 to 18 carbon atoms (See abstract).

As for claim 9, Example 4 of Cook shows the addition of sodium silica to the slurry.

As for claim 15, claim 8, of Miyauchi discloses an ethoxylation of 20 or 25 moles.

As for claim 16, claim 9 of Miyauchi discloses a fatty alcohol with 8 to 24 carbons.

As for claims 17-18, Cook notes that deinking is normally carried out at alkaline pH values, by definition alkaline is a pH above 7, thus encompassing the claimed pH values.

As for claim 19 and 77, the blend of Miyauchi meeting the claimed composition is a liquid at room temperature (See Col. 5, lines 28-30).

As for claims 22 and 25, examples 1-3 of Miyauchi show the claimed ratios.

As for claims 26-27, Miyauchi teaches of providing 0 to 20%wt by water, see abstract.

As for claim 29-30, 61 and 78, Miyauchi is silent disclosing adding the claimed second fatty acid recited in claim 29-30 of the instant invention. However, Miyauchi does teach

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that its deinking composition can be used in combination with other known deinking agents and cites as a few examples (Col. 4, lines 41-45). In view that Cook discloses the claimed fatty acid, it would be obvious to a person of ordinary skill in the art at the time the invention was made to have used Cook's deinking agent as taught by Miyauchi.

As for claim 73, Miyauchi discloses a HBL of 12; a difference of 1 HBL of the fatty alcohol would still provide an effective deinking agent without any unexpected results.

As for claim 5-8, 62-64, 74-76, 79-80, Miyauchi provides a plurality of fatty alcohols which as noted above is disclosed by Miyauchi in bridging paragraph of Col. 2-3, wherein m is zero.

Claim 28 is rejected under 35 U.S.C. 103(a) as obvious over Miyauchi et al (US 5,801,135) in view of Cook et al (WO 93/22491) as applied to claim 1 above, and in further view of Robinson et al (US 6,544,383). Neither Miyauchi nor Cook disclose alternative sources for fatty acids. However, Robinson teaches that tall oil can be used as a fatty acid deinking agent (Col. 6, line 24). Thus, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to have provided tall oil, as taught by Robinson, as an alternative source of fatty acid deinking agent to the combined teachings of Miyauchi and Cook.

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Claims 11-14, 31-35, 37-50, 53, 56-58, 65-69 are rejected under 35 U.S.C. 103(a) as obvious over Miyauchi et al (US 5,801,135) in view of Cook et al (WO 93/22491) as applied to claim 1 above, and in further view of Applicant's admitted prior art (PAT) disclosed in Applicant's Specification page 18. Miyauchi is silent disclosing adding the claimed cationic additive as a flotation additive. However, PAT discloses the claimed cationic additive, it would be obvious to a person of ordinary skill in the art at the time the invention was made to have used PAT's flotation additive in order to aid in the deinking waste paper.

As for claim 32, as shown in the examples the first fatty acid is non-alkoxylated.

As for claims 33-34 and 69, the first fatty acid comprises 40 to 90%wt of fatty acids having 12 to 14 carbon atoms and less than 60% wt fatty acids having 16 to 18 carbon atoms (See abstract).

As for claim 40, claim 8, of Miyauchi discloses an ethoxylation of 20 or 25 moles.

As for claim 41, claim 9 of Miyauchi discloses a fatty alcohol with 8 to 24 carbons.

As for claims 42 and 45-47, Cook notes that deinking is normally carried out at alkaline pH values, by definition alkaline is a pH above 7, thus encompassing the claimed pH values.

As for claim 50, the blend of Miyauchi meeting the claimed composition is a liquid at room temperature (See Col. 5, lines 28-30).

As for claims 53 and 56, examples 1-3 of Miyauchi show the claimed ratios.

As for claims 57-58, Miyauchi teaches of providing 0 to 20%wt by water, see abstract.

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As for claims 35 and 43-44, Miyauchi provides a plurality of fatty alcohols, which as noted above, is disclosed by Miyauchi in bridging paragraph of Col. 2-3, wherein m is zero.

As for claim 48-49 and 66, Miyauchi is silent disclosing adding the claimed second fatty acid recited in claim 48-49 and 66 of the instant invention. However, Miyauchi does teach that its deinking composition can be used in combination with other known deinking agents and cites as a few examples (Col. 4, lines 41-45). In view that Cook discloses the claimed fatty acid, it would be obvious to a person of ordinary skill in the art at the time the invention was made to have used Cook's deinking agent as taught by Miyauchi.

As for claims 67-68, Miyauchi 's bridging paragraph of Col. 2-3, discloses the claimed fatty alcohol wherein m is zero.

Claim 36 are rejected under 35 U.S.C. 103(a) as obvious over Miyauchi et al (US 5,801,135) in view of Cook et al (WO 93/22491) in view of Applicant's admitted prior art (PAT) disclosed in Applicant's Specification page 18, as applied to claim 31 above, and in further view of Borchardt (US 5,227,019). Miyauchi is silent disclosing adding the claimed second fatty alcohol recited in claims 35-36 of the instant invention. However, Miyauchi does teach that its deinking composition can be used in combination with other known deinking agents and cites as a few examples (Col. 4, lines 41-45).

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Borchardt in Col. 5, lines 1-5, discloses a deinking agent having the claimed fatty alcohol, wherein the claimed R has carbon chain of 8-18 carbons, the claimed m is .5 to 7, and the claimed n is 1 to 20.

At the time invention was made, it would have been obvious to a person of ordinary skill in the art to have used other known deinking agents such as those disclosed by Borchardt as explicitly taught by Miyauchi in order to provide deink waste paper.

Claim 59 is rejected under 35 U.S.C. 103(a) as obvious over Miyauchi et al (US 5,801,135) in view of Cook et al (WO 93/22491) in view of Applicant's admitted prior art (PAT) disclosed in Applicant's Specification page 18, as applied to claim 31 above, and in further view of Robinson et al (US 6,544,383). Miyauchi, PAT, nor Cook disclose alternative sources for fatty acids. However, Robinson teaches that tall oil can be used as a fatty acid deinking agent (Col. 6, line 24). Thus, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to have provided tall oil, as taught by Robinson, as an alternative source of fatty acid deinking agent to the combined teachings of Miyauchi, Cook and PAT.

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

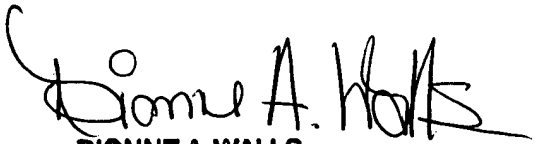
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CL


DIONNE A. WALLS
PRIMARY EXAMINER